

**ABSTRACT OF THE DISCLOSURE**

A method for generating, displaying and manipulating the orientation of three-dimensional vectors on a two-dimensional surface for visualization, statistical analysis and correlation. The method involves collecting vector data, transforming each vector into spherical co-ordinates, then assigning, a unique color related to a position on a spherical color model. A two-dimensional raster image filled with this unique color is centered at the point of measurement for each vector orientation as obtained from calculations or instrumentation capable of measuring this orientation. This methodology offers the user the ability to discriminate the location of specific orientations as well as the ability to define an enhanced full color gamut gradation for a specific range of orientation. This rendering of color-coded vector orientation enables easier understanding by the viewer of large data sets.